DOCUMENT RESUME

ED 118 571 SP 009 867

AUTHOR Murray, C. Kenneth, Ed.
TITLE West Virginia Review of Educational Research. Number 2, Fall 1975.
INSTITUTION West Virginia Association of Teacher Educators, Huntington.
PUB DATE 75
NOTE 51p.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage
DESCRIPTORS *Abstracts; Behavior Change; Curriculum Development; *Educational Research; *Elementary Secondary Education; Field Experience Programs; Locus of Control; Mathematics Instruction; Moral Development; Social Studies; *Teacher Behavior; *Teacher Education; Writing

ABSTRACT

This document contains abstracts of experimental and descriptive educational research in West Virginia. The stated purposes of the document are to disseminate relevent educational research to West Virginia teacher educators, to encourage ongoing research in all areas and at all levels in education, and to develop professional utilization of research findings. Among the subjects covered in the research abstracted in this document are (1) field experience programs, (2) school staff relationships, (3) verbal behavior of student teachers, (4) training for cooperating teachers, (5) writing instruction, (6) mathematics instruction and the preparation of secondary school mathematics teachers, (7) predicting teacher behavior, (8) locus of control, (9) training of undergraduate teacher aides, (10) behavior modification, (11) video-taped models, (12) peer interaction and moral development, (13) search and seizure in public schools, and (14) community college curriculum development. (CD)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED118571

West Virginia

Association of Teacher Educators

WEST VIRGINIA REVIEW OF EDUCATIONAL RESEARCH

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

SP 009 867

Fall, 1975
Number 2

WEST VIRGINIA REVIEW OF EDUCATIONAL RESEARCH

C. Kenneth Murray - Editor
West Virginia University

For Information, contact:
W. Va. Review of Educational Research
217 Jenkins Hall
Marshall University
Huntington, WV 25701

Published by:
Marshall University

WEST VIRGINIA REVIEW OF EDUCATIONAL RESEARCH

Number 2 Fall, 1975

TABLE OF CONTENTS

The Salem Teacher Education Model: A Modular Follow-Through Approach Within A Field-Laboratory Model	*John Spears and Gary McAllister*	2
A New Dimension In Teacher Education: Training Undergraduate Aides	*Richard Drummong*	5
The Effect of Field Participation and Classroom Experiences Upon Perceptions of Prospective Teachers	*Robert Bartos*	7
Introducing Teacher-Trainees to Behavior Modification Techniques and The Application of Those Techniques in Increasing Social and Academic Behaviors of Pre-school Children	*Arlene Sacks*	9
Elementary School Staff Relationships As Predictors of Sixth Grade Reading, English, and Arithmetic Achievement	*Lewis Herring*	11
The Verbal Behavior of Student Teachers In Open and Traditional Classrooms	*Ernest Broadwater and Lawrence Barker*	13
The Effect of Three Timed Video-taped Modeling Procedures on Selected Verbal Behaviors of Student Teachers	*Harry Preister*	16
The Effect of Training In Helping Relationships for Cooperating Secondary School Teachers	John Mullennex	18
I'm OK, You're OK, Let's Write	*Robert Gillingham*	20
Modification of Locus of Control In a Sport Setting	*James Di Febo*	22
Locus of Control as a Determinant of Attitudes and Beliefs of 12th Grade Students Concerning Cheating	*Lynn Kling, Jr.*	23
The Effect of Peer Interaction In Cognitive Conflict Situations on the Moral Development of Third Grade Children	*Sallie Plymale*	25

Knowledge and Images of India: The Perceptions of Seventh Grade Students	*Perry D. Phillips*	27
The Relationship Between Personality and Concept Recognition As a Result of Participation in a Social Studies Simulation Game	*Larry A. Sayre*	29
Predicting Social Studies Teacher Behavior	*C. Kenneth Murray and Hugh J. Treanor*	31
Preparation of Mathematics Teachers In Public Secondary Schools of West Virginia	*Steven Hatfield*	33
The Effect of Reflective-Impulsive Attitude on Learning Under Two Instructional Treatments	*Edward Moran*	35
Interaction Between Selected Personalogical Variables and Two Methods of Teaching Probability To Prospective Elementary Teachers	*Edwin Neale Blackwood, Jr.*	36
Dogmatism and Manipulative Devices In The Learning of Mathematical Concepts	*Ralph Hall*	38
An Analysis of Children's Written Solutions to Word Problems	*J. Dan Knifog and Boyd Holtan*	39
An Analysis of Selected Court Cases and Public Policies Pertaining to Search and Seizure in Public Schools	*Stanley Anderson*	41
The Field Experience	*Nancy J. Priselac and Harold Goodwin*	43
Educational Needs and Existing Resources for Community College Curriculum Development	*Samuel Bailey*	45

FOREWORD

With this second publication of the *West Virginia Review of Educational Research*, the West Virginia Association of Teacher Educators reaffirms its interest in and commitment to the role of research in our profession. The Association encourages its members to collect data to test the worth of ideas and programs.

The *Review of Educational Research* publishes abstracts of experimental and descriptive research studies related to education in West Virginia. Toward this end, the specific purposes of the Review are: (1) to disseminate relevant educational research to West Virginia teacher educators; (2) to encourage ongoing research in all areas and at all levels in education; and (3) to develop professional utilization of research findings.

All manuscripts for publication should be submitted to the Research Editor in abstract form of no more than two typed 8½ x 11 pages. All abstracts should conform to the following standards:

1. In an experimental study, include statements of (a) the problem, (b) the procedures and method, (c) summary of findings, and (d) conclusion(s).
2. In a descriptive study, state the topics covered and the central thesis(es).
3. Each abstract should include the author's name, institution, and pertinent bibliography.

Persons who are interested in securing the complete copy of a specific study abstracted in the Review should contact the authors.

C. Kenneth Murray
Editor
West Virginia Review of Educational Research

THE SALEM TEACHER EDUCATION MODEL: A MODULAR FOLLOW-THROUGH APPROACH WITHIN A FIELD-LABORATORY MODEL

John Spears
Salem College

and

Gary McAllister
Salem College

The Salem Teacher Education Model (STEM) is a cooperative endeavor by Salem College, Salem, West Virginia, in partnership with the Harrison County Teacher Education Center and four other Central West Virginia Public School Systems (Lewis, Doddridge, Ritchie, and Wood Counties) to design the best possible educational opportunities for pre-student teachers, student-teachers and teachers in Central West Virginia.

Theoretical Framework of the Model

Within the last year, because of enrollment difficulties and a desire of the college to grow and continue its role in higher education in West Virginia and the nation, the Board of Trustees of Salem, its administrative staff and faculty committed themselves to the recruitment and retention of students. As a consequence, members of the Department of Education embarked upon the development of this Teacher Education Model which would not only accentuate recruitment and retention, but build through reciprocal relationships, a modular follow-through program within a field-laboratory model. The Salem Teacher Education Model (STEM) was designed to contribute toward a solution of the recruitment-retention problem, to utilize and maximize the talents and to build a more complete and comprehensive teacher education program. The model challenges us to keep pace with new issues and emerging national trends. The curriculum design was innovative and creative. No other higher education institution in West Virginia has a total modular, professional laboratory and field-oriented model encompassing a complete pre-service screening device, co-curricular mini-modular experiences to enrich and enhance accountability instrument for evaluation purposes. The model is comprehensive in nature extending from the freshman year through the first year of Teaching–Orientation to Teacher Education to follow-through and evaluation in the beginning years of teaching. What follows is a basic outline of the master plan for curriculum improvement, implementation and evaluation of teacher education at Salem College.

Objectives and Functions of the Model

The objectives of the Model are multi-dimensional in nature and correlate with proposed Model functions. Basically, the proposed general functions can be categorized into four major goal areas:

I. Providing diagnostic, laboratory, field, and clinical experiences for the pre-student teacher with emphasis on the practical aspects of teaching (i.e. foundational retention program, youth aide experiences, tutorial activity, college aide program, instructional aide and laboratory assistant experiences.)

II. Providing pre-service experiences for the student teacher with emphasis on experimental and innovative programs. (i.e. clinical seminar supervision)

III. Encouraging personal enrichment through a series of intermittent mini-clinical experiences which enhance the formalized structure of professional sequences. (i.e. professional organizations awareness, media education, learning disabilities, observation experiences, orientation to student-teaching, a professional semester, and a complete post student-teaching analysis.)

IV. Developing a Follow-Through Program to improve teacher education in Central West Virginia and enhance recruitment opportunities for the College. The Follow-Through consists of two important components:

1. A Follow-Up Program to help new teachers face and solve beginning teacher problems.
2. A Special School Services Program for cooperating school systems emphasizing skill development for public school teachers.

The Screening Device

The Salem Teacher Education Model (STEM) has built into it a comprehensive and inclusive screening process. As a prospective teacher proceeds throughout the STEM he will have ample opportunities, not only to be evaluated and aided in developing a self-improvement program, but to evaluate himself. In recognizing the high standards required of a teacher, the Model commits itself to a quality program of retention and self-improvement.

The Pre-Service Screening Procedure begins in the Freshman Year with orientation to teacher education with a diagnostic emphasis into the Sophomore Year with emphasis upon screening, retention, referral, continuing in the Junior Year with further analysis and admission to a Teacher Education Curriculum, and culminating in the Senior Year with personal adjustments as a result of evaluation by professional personnel of the college and the public school and with self and administrative follow-up evaluation by the new teacher and his administrator.

An Evaluative Support System: A Competency-Based Accountability Instrument

Any innovative program demands the newest analytic techniques. STEM makes such an attempt through certain evaluative support systems which accentuates basic performance-based tenets and accountability precepts of Competency-Based Teacher Education.

This modular field-laboratory model as structured meets or exceeds the competencies as outlined by the West Virginia State Department of Education's "Professional Education Standards for Certification and Accreditation" and the Department's evaluative device known as "Factors in Program Analysis." The Model includes a coded Competency-Based Accountability Instrument for Program Analysis based upon the criteria delineated in the two above-mentioned documents. With its usage, one can readily discern program weaknesses and strengths.

Conclusion

Let us examine what Salem College has done, what it is doing, and what it hopes to do. Historically, the College operated a somewhat traditional teacher education program with a few professional courses, a great deal of subject work, and ending with "observed practice teaching". With the emergence of the Harrison County Teacher Education Center (HCTEC), teacher education at Salem College took on a new look with three professional laboratory experiences, two in the Sophomore Year and one in the Junior Year. The Professional Block preceded the traditional 8 - 10 weeks of "Directed Teaching". The Salem Teacher Education Model (STEM) is another natural extension of growth. It is an examination of what the program has been is now, and will have to become in order to keep pace with new trends. Excellent programs, the Tutoring and College Aide experiences, have been evaluated and modified this year. The Laboratory Assistant and Elementary Student Teaching Programs are "performance-based pilots." It is hoped STEM will provide an opportunity for the total program to go forward with a plan that will launch teacher education at Salem into a bright future.

A NEW DIMENSION IN TEACHER EDUCATION: TRAINING UNDERGRADUATE AIDES

Richard Drummond
Harrison County Schools

Educational history of our future teacher training programs indicates that course requirements, student teaching experiences, and related requirements are constantly on the change. One recent method of change is the College Aide Program being conducted by Salem College (W.Va.) in cooperation with Harrison County Schools and the Harrison County Teacher Education Center.

The aides are assigned during their undergraduate years to a six week internship within the public schools under the supervision of a principal, a qualified teacher, and the college supervisor. The aide is not necessarily assigned in his major or minor field. The main objective of the program is to expose the college student to the schools, have them working with competent teachers, and to get involved with public school children. The aide can participate in a variety of experiences such as grading papers, participating in group discussions, conducting mini-classes, assuming various leadership roles, or designing his own program and evaluating the results.

The following is a summary of how a physical education major met his aide requirements by attempting to increase leisure time reading for enjoyment while working in the library.

The aide was assigned to work with 40 seventh grade boys (two sections of twenty) in the library under the supervision of the physical education instructor. He administered a pre survey to determine the reading habits of the students. He was particularly interested in the reading interest area, amount of reading, and enjoyment of reading that the student participated in during his leisure time. The survey indicated the students were doing very little reading for personal enjoyment.

The aid constructed wall charts for the students to record articles read in their interest areas to encourage others to read the articles. By checking the charts frequently, the aide could discuss the articles with the students and recommend to them other related articles that might be of interest in a similar area. The aide also brought in magazines and encouraged the students to bring materials from home to exchange with other students.

The post survey was administered at the conclusion of the sixth week of the aide's internship. By comparing the pre and post surveys, it was concluded that the aide's reading for enjoyment during leisure time had been a great

success. The students had broadened their interest areas and were enjoying reading in these related areas to a greater degree than before the aide innovated this program.

Undergraduate future teachers can benefit tremendously by participating in similar aide programs. It is the responsibility of the college to involve its students in programs whereby they become active with students prior to their student teaching experience.

THE EFFECT OF FIELD PARTICIPATION AND CLASSROOM EXPERIENCES UPON PERCEPTIONS OF PROSPECTIVE TEACHERS

Robert Bartos
West Virginia University

The major objective of this study was to compare the effects of presenting both field participation and classroom experiences to prospective teachers in an introductory course in Education at West Virginia University. The study tested the hypotheses that either field participation or classroom experiences or the combination or elimination of both would not affect the prospective teachers' perceptions regarding:

1. degree of open-mindedness
2. degree of self-actualization
3. self-concept
4. relationship to his students
5. degree of inclusion, control and affection

Four groups of prospective teachers were randomly selected from a total population of 487 students enrolled in Curriculum and Instruction 7, an introductory course in Education. Each group consisted of 15 students, majoring either in secondary or elementary education and consisting of freshmen, sophomores, juniors and seniors. All of the subjects were given a pre-test using all test instruments prior to receiving any treatment.

After pre-testing of all groups was completed, the prospective teachers in Group A were assigned field participation experiences for a ten week period. This consisted of two hours per week in some type of field experiences. During this period of time they were to receive no classroom experiences. Prospective teachers in Group B were given classroom experiences over a ten week period, but were not assigned to any field participation experiences. Classroom experiences consisted of two hour blocks over a ten week period. Prospective teachers in Group C were assigned field participation experiences for a ten week period. They received classroom experiences as well during that ten week period. The field experiences were similar to those assigned to Group A and classroom experiences were similar to those administered to Group B. Prospective teachers in Group D received neither field participation experiences nor classroom experiences over the ten week period and was the control for this study.

Prospective teachers in all groups were administered post-tests using all test instruments. The hypotheses concerning prospective teacher perceptions were tested by means of the analysis of variance test statistic. The results of these findings showed little statistically significant difference among or within the

groups. There were however trends showing gains in mean scores within the groups in many of the variables tested.

An analysis of growth patterns indicate that since the act of teaching involves working with people, a logical assumption can be made concerning the treatment in which both components were utilized that being field participation and classroom experiences. This involves giving the prospective teacher enough classroom theory so that the prospective teacher is able to conceptualize a basic theoretical foundation regarding how a teacher should teach. Secondly, when this foundation is conceptualized the prospective teacher must be presented with opportunities to practice the basic beliefs they perceive regarding the act of teaching. The results of this study indicate that most positive growth occurred when both components (theory and practice) are presented during the same semester of the prospective teacher's college training.

The results of this study seem to show two clear implications:

1. Programs can be started at an earlier stage in a prospective teacher's training that will facilitate both theory and practice if they are administered concurrently.
2. Programs must continually be designed through a prospective teacher's training to give each prospective teacher the opportunity to experience many practical applications of theory related ideals.

In summary, the evidence of this study shows significant trends towards an arrangement of both field experiences and classroom experiences concurrently for prospective teachers as a means of perceptual change at an earlier period in a students training.

INTRODUCING TEACHER-TRAINEES TO BEHAVIOR MODIFICATION TECHNIQUES AND THE APPLICATION OF THOSE TECHNIQUES IN INCREASING SOCIAL AND ACADEMIC BEHAVIORS OF PRESCHOOL CHILDREN

Arlene Shaw Sacks
West Virginia University

The present study attempted to determine sufficient conditions for improving the performance of preschoolers under the management of teacher-trainees; determine whether social or inexpensive material reinforcers had a greater effect on the modification of the behavior of the preschoolers; and determine whether undergraduates in a teacher-training program delivered reinforcers more consistantly and accurately when using social or when using inexpensive material reinforcers.

Eight undergraduates were taught basic behavior modification techniques and assigned eight preschoolers to work with. The undergraduates attempted to increase desirable social and academic behaviors by consistently delivering material and social reinforcers.

A modified multiple baseline approach similar to a series of AB designs was employed with one behavior charted for each of the eight children. Four phases were involved in the multiple baseline. In Phase I, the length of the baseline differed for different children. In Phase II the first reinforcement (social or material) was applied for five sessions. In Phase III the second reinforcement (social or material) was applied for five sessions. The same behavior was recorded as in Phases I and II. However, there was a reinforcement type change from social to material or material to social.

Phase IV was applied for five sessions, the first two days of Phase IV were baseline-two in which no reinforcers were given. On these two days the same behavior as that of the baseline was recorded. In the last three days of Phase IV, there was no uniform system for reinforcing the children, although their behavior was still being recorded. The last three days of Phase IV left the undergraduate on his own to use his own devices for reinforcement or nonreinforcement, as he desired.

The material used by the children during Phases I-IV was standard gym and learning equipment found in most preschools and nurseries. The social reinforcer applied during treatment was for the undergraduate to smile, say "very good", and touch the child's wrist. The material reinforcers provided took the form of a deck of 36 educational cards called Edu-Cards with different pictures of Charlie Chaplin.

The conditions of the study did indeed improve the performance of each of the preschoolers under the management of teacher-trainees. The seven behaviors were: 1) staying with the group, 2) compliance with teacher requests, 3) identification of letters of the alphabet, 4) identification of letters of the alphabet, 5) identification of colors, 6) writing letters of the alphabet, and 7) counting objects from 1-20. In this study, it was not possible to determine which reinforcer was more effective. By systematically employing social or material reinforcers, the undergraduate succeeded in increasing the percentage of appropriate responses the child made.

The undergraduate delivered both types of reinforcers consistently and accurately. The influence of feedback from the experimenter to the undergraduates might have been an important factor regardless of which reinforcer was being delivered. Another reason for the high rate of consistency and accuracy on the part of the undergraduate may have been the motivational component associated with the initial increase in the children's desired behavior shortly after reinforcement procedures were initiated.

Teacher-training techniques could benefit from using either social or material reinforcers under similar conditions as those of the present study. These techniques could be implemented by college instructors or graduate supervisors. Undergraduates could also be trained to run behavior modification programs. The implications of training classroom teachers, graduate students, and undergraduates offer unlimited possibilities to teacher-training institutions.

ELEMENTARY SCHOOL STAFF RELATIONSHIPS AS PREDICTORS OF SIXTH GRADE READING, ENGLISH, AND ARITHMETIC ACHIEVEMENT

Lewis Homer Herring
Fairmont State College

The purpose of this study was five-fold: First, determine the congruence between formal and informal organizational structures for elementary curricular matters. Second, test congruence as a predictor of achievement and achievement gain. Third, test congruence with six other independent variables in predicting achievement in reading, English, and arithmetic at grade six. Fourth, test the relationahip of staff tenure with rank in the formal organization and in each dimension of the informal organization. Fifth, test administrative rank in each organization to determine if trends exists.

Congruence factors were determined by using Kendall's tau and Spearman's rank difference correlation statistics upon data collected from each school staff. Congruence factors were then tested against mean composite achievement (1973) and achievement gain (1970-73) using simple regression, chi-square and exact probability statistics. Using analysis of covariance procedures, deviate school achievement data were tested adjusting for I.Q. across schools. With multiple regression procedures prediction equations for the three dependent variables (sixth grade reading, English, and arithmetic achievement) were established using the following independent variables, Aid to Dependent Children, Congruence, Percentage of Enrollment Non-White, Sixth Grade Enrollment, Percentage of Males in Sixth Grade, I.Q. at Test Time (March, 1973), and average achievement at the third grade level in the subject being tested. Chi-square and exact probability tests were used to test the relationship of staff tenure with rank in the formal organization and in each dimension of the informal organization. Pearson product moment correlation procedures were used with the five administrative job categories to determine if standardized ranks in each organization produced any definite trends.

Congruence factors arranged from -.35 to +.77. Fifty-six percent of the schools reached levels of significance for congruence. When congruence was tested against achievement and achievement gain, significance was not reached. Predicting achievement adjusted for I.Q. across schools produced scores above the observed sample mean for ten of the eleven deviate schools.

The following prediction models were deemed significant at the .10 level:

Sixth Grade Reading = -0.3926 + 0.8941 RE_1 + 0.0363 IQ + -1.2599 ADC + 0.4701 CON

Sixth Grade English = -0.4107 + 0.8141 EN_1 + 0.0387 IQ + -0.5717 CON

Sixth Grade Arithmetic = -0.5060 + 0.0516 IQ + 0.4324 MA_1

Supervisors who had longer service had significant rank in the formal organization; teachers who had longer service had significant rank in the attributed power and reliance dimensions of the informal organization. All other tests failed to reach significance. A significant trend existed for superintendents to rank similarly in both organizational structures. Significance was not reached for assistant superintendents, general supervisors, guidance personnel, or principals.

Congruence levels can be determined for elementary schools; however, congruence alone will not predict achievement or achievement gain at grade six. When tested with six other independent variables, congruence enters as the fourth variable in predicting sixth grade reading, third in predicting sixth grade English, but not in predicting sixth grade arithmetic. Formal rank was deemed independent of tenure for all job categories except supervisors. Rank in each dimension of the informal organization were deemed independent for all job catagoreis except teachers in the attributed power and reliance dimensions. The only administrative job classification possessing a significant trend for rank in both organizational structures was that of the school superintendents.

THE VERBAL BEHAVIOR OF STUDENT TEACHERS IN OPEN AND TRADITIONAL CLASSROOMS

Ernest H. Broadwater
Marshall University

and

Lawrence W. Barker
Marshall University

"What happens to children in open classrooms? Can teachers be trained for open classrooms?"[1] These questions originally posed by Roland S. Barth relate directly to this study.

Since the publication of the Plowden Report[2] many pronouncements have been made about the behavior of pupils and teachers in the open classroom with its pupil centered approach to education and with the teacher in the role of a facilitator rather than an authoritarian. Moorhouse[3] and Gingell[4] have subsequently emphasized the meeting of individual differences as a major component of the open classroom. Silberman[5] has stated that teacher dominated discussion is characteristic of traditional rather than open classrooms and Coletta[6] found open and traditional teachers differ significantly regarding assumptions about open education.

If the above are representative characteristics of open classrooms, one might anticipate the answers to Barth's questions to be more student participation and openness in communication and more indirect teacher behavior in open classrooms. The present study recorded verbal behaviors in open and traditional classrooms to determine if the observed behaviors were consistent with earlier statements concerning open classrooms.

Twenty-nine student teacher interns were each observed for twenty minutes on three occasions using the Observational System for Instructional Analysis.[7] The purpose of the observations was to obtain data in the classroom regarding the verbal behavior of student teachers and students while the student teachers were teaching. The student teachers and supervising teachers in the public schools were informed that the purpose of the observations would have no bearing whatsoever on grades for student teaching. They were asked to conduct their classes as they would if the observer were not present. The authors are both trained in the observation system used and, for each student teacher, one author did two observations and the other did one observation.

From the total of 29 student teachers, college supervisors identified 7 as being placed in very "traditional" classrooms and 8 as being placed in very "open" classrooms. Traditional classrooms were those where furniture was arranged for large group instruction, and there was an absence of learning

centers, or identifiable areas for small group instruction. Open classrooms were characterized as having numerous learning centers for small group activities, availability of supplies and materials for student use, and independent study areas. Furthermore, these classrooms were regarded by University personnel as models of the open classroom.

All of the student teachers were senior students in the elementary education program at Marshall University. Their placements for student teaching had been done in a random manner. Thus, the two groups of student teachers had similar academic preparation and no preferences of student teachers or supervising teachers were operating in the selection of students for placement in the open or traditional classrooms.

The data analyses for the study consisted of comparing the verbal behavior of student teachers in open classroom placements with the verbal behavior of student teachers in traditional classroom placements. Comparisons were made on five categories of verbal behavior: (1) ratio of teacher indirect to direct behavior; (2) ratio of teacher positive and accepting behavior to corrective and negative behavior; (3) sum of teacher acceptance behavior; (4) sum of student appraisal behavior; and (5) ratio of teacher talk to student talk.

None of the test comparing the differences between the means for the student teachers placed in traditional and open classrooms produced results significant beyond the .05 level. Furthermore, student teacher acceptance behavior (communicating to the student that you heard and understood what he said without any value judgment) and student appraisal behavior (students communicating corrective feedback, confirmation, acceptance, positive or negative personal judgment) occurred on the average of less than two times per observation in each classroom category. The infrequency of these behaviors and the failure to observe more indirect student teacher behavior in the open classroom is inconsistent with the open classroom concept.

The major implication derived from the results of this study is that, specific training efforts during teacher preparation will be needed to obtain teacher behavior consistent with the expectations of the open classroom and it cannot be expected that merely placing the student teachers with an open classroom teacher in an open classroom will produce verbal behavior any different from that observed in student teachers placed with traditional teachers in traditional classrooms.

FOOTNOTES

[1] Roland S. Barth, *'So You Want To Change To Be An Open Classroom"*, Phi Delta Kappan, October, 1971, pp. 97-99.

[2]Children and Their Primary Schools: ("The Plowden Report") A Report of the Central Advisory Council for Education, (London: Her Majesty's Stationary Office, 1967).

[3]Edith Moorhouse, "The Philosophy Underlying the British Primary School" in Rogers, Vincent R., Teaching in the British Primary School, The Macmillan Co., Toronto, Canada, 1970.

[4]Lesley P. Gingell, The ABC's of the Open Classroom, ETC Publications, Homewood, Illinois, 1973.

[5]Charles E. Silberman, Crisis in the Classroom, Random House, New York, 1970.

[6]Anthony J. Coletta, "Do Open and Traditional Teachers Differ in Their Beliefs About Learning?", Phi Delta Kappan, May, 1974, pp. 636-637.

THE EFFECT OF THREE TIMED VIDEO-TAPED MODELING PROCEDURES ON SELECTED VERBAL BEHAVIORS OF STUDENT TEACHERS

Harry Gene Priestar
Fairmont State College

This study was designed to determine what effect the three timed video-taped modeling procedures had on the selected verbal teaching behavior of pre-service student teachers. Specifically, the investigator was interested in answers to the following questions:

(1) To what extent do the three timed video-taped modeling procedures effect the selected verbal teaching behavior of pre-service student teachers?

(2) To what extent do the three timed video-taped modeling procedures effect the selected verbal teaching behavior of pre-service student teachers over time?

(3) To what extent does one timed video-taped modeling procedure exert more influence on the selected verbal teaching behavior of pre-service student teachers than does either of the other two?

(4) To what extent is the interaction among and between main effect variables Teaching Situation Reaction Test (T.S.R.T.), modeling procedures (Model), and Time (Post Test one, Post Test two and Post Test three).

The seventy-two subjects who comprised the sample for this study were drawn from a parent population of one hundred forty pre-service student teachers in Education 433, a general methods course. During the week of February 26, 1973, the Teaching Situation Reaction Test (TSRT) was given to all the education 433 students. The test was scored and the scores were ranked from highest to lowest. Only those people whose scores fell in the upper and lower quartiles of the test were used in the sample population. Following this procedure, equal numbers of individuals were randomly selected from the upper and lower quartile pools and assigned to the one, six, or eleven minute modeling treatments.

Group one viewed a one minute video-taped model of Flanders categories one, two and three.

Group two viewed a six minute video-taped model of Flanders categories one, two and three.

Group three viewed an eleven minute video-taped model of Flanders categories one, two and three.

During the student teaching experience, each student teacher was observed four times. These observations were of fifteen minutes duration and occurred prior to treatment (pre test) and after treatment (post test one, two and three). Flanders System of Interaction Analysis was the criterion measure used to collect the verbal data of the student teachers. The data were preserved on cards and subjected to an analysis of variance technique to determine the differences and changes.

The findings of the study indicated that: (1) the eleven minute modeling group performed significantly better than did the one minute and six minute models. (2) The eleven minute modeling group performed significantly better than did the one minute and six minute models over time (3) The interaction effect was significant for TSRT x Time, Model x Time and TSRT x Model x Time. In most cases, the TSRT highs performed significantly better than did the TSRT lows. The results then appear to support the research of others concerning the influence of a video-taped modeling procedure on the verbal behavior of student teachers.

THE EFFECT OF TRAINING IN HELPING RELATIONSHIPS FOR COOPERATING SECONDARY SCHOOL TEACHERS

John Mullennex
Randolph County Schools

The major objective of this study was to ascertain the effects of 14 hours of intensive training in helping relationships for cooperating secondary school teachers. The study tested the hypotheses that the training experience would not affect the cooperating teachers' perceptions regarding (1) the degree of open mindedness, (2) interpersonal relationships with their prospective teachers, and (3) reactions to classroom situations. The study also tested the hypotheses that the training experience would not affect the prospective teachers' perceptions regarding (1) personal needs and (2) cooperating teacher verbal behavior.

Sixty self-selected public school secondary teachers, working in conjunction with the West Virginia University teacher education program, formed the population from which the experimental and control group samples for this study were drawn. Fourteen members from the self-selected population were randomly assigned to each group. Experimental group subjects actively participated in 14 hours of intensive training in helping relationships over a two day period during the second week of the student teaching experience. Control group subjects received no special training. Prospective teachers from the entire population of prospective teachers participating in student teaching during the second semester of the 1971-72 academic year at West Virginia University were randomly assigned, with respect to subject matter areas, to cooperating teachers in each group. Prospective teachers received no special training in helping relationships.

Cooperating teachers from both groups were pre and post tested on perceptions regarding interpersonal relationships with their prospective teachers, their degree of open mindedness, and their reactions to classroom situations. Prospective teachers from both groups were pre and post tested on perceptions regarding their personal needs and cooperating teacher verbal behavior. In addition, prospective teachers from both groups were tested on perceptions regarding interpersonal relationships with their cooperating teachers, their degree of open mindedness, and their reactions to classroom situations. This was done so cooperating teachers from both groups could be associated with their respective prospective teachers on the aforementioned variables. The resulting associations on each variable were compared between the experimental and control groups of teachers with use of the Fisher z transformation.

Both groups of cooperating teachers and both groups of prospective

teachers were compared with the analysis of variance test statistic. Comparisons were made at the .05 level of statistical significance both between and within the groups. The analysis of covariance was used for post-test adjustment when significant pre-test differences occurred for between group comparisons.

The results of this study suggested that prospective teachers who participated in student teaching with cooperating teachers trained in helping relationships desired more praise and perceived more suggestion giving from their cooperating teachers than prospective teachers who participated in student teaching with cooperating teachers not trained in helping relationships. The two groups of prospective teachers differed in a statistically significantly manner at the .05 level of confidence on the two aforementioned components of perceived cooperating teacher verbal behavior. None of the twenty-four hypotheses tested in this study were rejected; however, the group mean scores seemed to suggest that the training in helping relationships experience for cooperating secondary school teachers did positively affect those teachers' and their prospective teachers' perceptions regarding the respective variables on which they were measured.

I'M OK, YOU'RE OK; LET'S WRITE

Robert C. Gillingham
Fayette Campus, The Pennsylvania State University
Uniontown, Pennsylvania

Repeatedly we teachers of composition are confronted with anxiety and distaste students have for writing. Yet students can hardly have other than negative responses to writing since their graded compositions are replete with symbols indicating mechanical errors, faulty structure, and stylistic weaknesses. In an effort to combat rampant negativism, I experimented with positive approaches to teaching composition. Offered here is an overview of my experiments and conclusions.

I devoted the first three meetings of the course to cram sessions in positive thinking. The objectives of the first three meetings were: 1. to establish group rapport by enabling the student to know the class and me and to discuss himself with us; 2. to enable the student to see himself in positive terms and to see the humanity of others; 3. to give the student a series of positive experiences as an introduction to his first composition.

During the first class meeting, I attempted to remove the cold aloofness often found in unacquainted groups. To break the ice, I asked the students to segment themselves into small groups, introduce themselves, and talk with anybody in the group. Second, we introduced ourselves to the class, told something unique about us, and encouraged questions about us. Third, the students assembled into different small groups to perform a major positive exercise. Students were asked to draw a shield resembling a coat of arms and divide the shield into six blocks. In each block, the student was to draw a symbol to answer a question I posed. All responses must be positive. Sample questions were: How do you see yourself? (One student drew a growing flower); When are you the happiest?; What can you give mankind? Beneath the shield the student was to write three values by which he lives (Hope, Love, Truth). Each student then explained his shield to his group.

The second class of the week was designed to further group interaction and positive thinking. Again the students broke into groups (by now each student had associated with nearly twenty classmates). After introductions, the class discussed the feelings involved in giving and receiving gifts and compliments. As a follow up, each student drew on separate sheets of paper a positive symbol to illustrate his perception of each member in his group. (Students drew such things as a bird in flight to indicate curriosity). Then each

group member had his turn to receive symbolic compliments from all other group members. We then further explored giving and receiving.

For the final meeting, students were asked to prepare a list of the things they did well and explore why they did them well. Each student was to discuss his strengths with the class. At the end of the exercise, I distributed a list of questions which the student was to fill in: I am a_____; I can give_____; I am good at _____. This topic evolved into the student's first composition.

The exercises of the first week were a prelude to further activities which primarily stressed the positive aspects of a student's writing. My objectives here were to use the group rapport and respect for individuality already established to enable the student to concentrate on his writing strengths, while also correcting his weaknesses. Emphasis was on what the student did well. One, on the fourth class meeting and after the first composition had been written, I asked the students to devise criteria for a good composition. All future papers were to be evaluated by the criteria, and students were asked to practice aspects of the criteria they already did well. Two, on each subsequent paper I accentuated the strengths in that composition. My evaluation was two-part: a list of major weaknesses and a lengthy enumeration of strengths. I discarded my red pen. But I made clear that all future compositions would be examined closely for previously committed major errors. Three, I instituted "The Pit," the placing of any paper the student chooses on an opaque projector for close scrutiny. Each class meeting, one student was in "The Pit" for a fifteen minute session, during which time he was responsible for discussing his paper with the class. Student remarks about the paper must be approximately equal, positive and negative; and the class was to offer solutions to problems in the composition. After discussion, the class placed a grade evaluation on the paper, summarizing the strengths and weaknesses in the composition.

The following are the results of my experiments. One, students' class attitudes and responses to "The Pit" indicated openness to the principles of the composition. Two, by examining students' progress in successive papers, I found that nearly eighty percent of the students showed marked improvement in structure and style; only ten percent showed no improvement in mechanics. Three, I used a subjective questionnaire to evaluate the first three class meetings, my method of grading papers, and "The Pit." Students' anonymous responses indicated a general absence of fear before writing, confidence with the composition, and freedom and willingness to experiment with their own composition techniques.

The experiment was exciting and fruitful. We all had something more to look forward to than negative disinterest, for we knew that we were OK.

MODIFICATION OF LOCUS OF CONTROL IN A SPORT SETTING

James DiFebo
West Virginia University

The basic purpose of the investigation was to determine whether college students would become more internal when exposed to a sport locus of control model within a sport activity than students participating in traditional sport activity instruction. Moreover, internals and externals were compared on physical skill gain within the two activities utilized in the study (gymnastics and handball), and the relationship between locus of control and conformity was investigated.

Students exposed to the model changed their locus of control toward an internal direction significantly more than students exposed to traditional instruction ($F = 3.29$, $df = 1/108$, $p = .069$) as measured by Rotter locus of control gain scores (pretest minus posttest). Within each activity separately, students exposed to the model changed significantly toward a more internal control as revealed by t-test analyses on pretest and posttest Rotter scores. The control group (traditional instruction) did not change significantly toward an internal control indicating the display of physical skill to be insufficient to bring about modification. There was no significant change in locus of control evidenced by scores yielded on the MacDonald-Tseng and Sport locus of control scales indicating that students changed their general expectancy but not their expectancy toward a more unidimensional construct.

It was also determined that males changed toward an internal control more than females, implying that males are more susceptible to locus of control modification than are females when a sport setting is utilized as a medium for change. This difference is possibly due to the prior expectancies which females have toward reinforcements resulting from participation in sport activities.

Internals were found not to gain more in physical skill than externals in either sport activity (gymnastics and handball). However, the sample size was small and a median-split (conducted to determine internals and externals) may be too crude a dichotomy to warrant definitive conclusions concerning differences which may or may not exist between internals and externals with regard to physical skill acquisition.

In examining the relationship between conformity and locus of control, it was found that no association between these two constructs existed. A correlational analysis of Rotter scores with scores on a conformity scale showed $r = -.03$ ($N = 296$). In addition, internals and externals (determined by a 27% split on Rotter scores) were found not to differ in tendency to conform (measured by conformity scale scores).

LOCUS OF CONTROL AS A DETERMINANT OF ATTITUDES AND BELIEFS OF 12th GRADE STUDENTS CONCERNING CHEATING

Lynn W. Kling, Jr.
West Virginia University

The objective of this study was to determine the extent of association between locus of control as defined by the Rotter I-E Scale and student attitudes and beliefs measured using the Fishbein and Raven AB Scales when students were confronted with a value-oriented question regarding the legitimacy of cheating. A sample of 267 12th grade students was drawn from the population of a suburban high school located in a relatively homogeneous community of native-born white middle-class families. Subjects were grouped by a sex and internal or external locus of control as determined by a median split of scores from the Rotter I-E Scale. The resulting four-way classification consisted of 59 male-internals, 64 female-internals, 38 male-externals, and 87 female-externals.

Using a Chi square test, it was determined that a significantly ($p = .02$) larger group of external subjects admitted to having cheated during high school than internal subjects. On the other hand, over-all group mean scores yielded by the Fishbein and Raven AB Scales showed slightly negative student attitudes (mean = -1.55) toward cheating. At the same time, positive belief scores (mean = 6.36) tended to indicate a feeling on the part of students surveyed that cheating existed as a legitimate form of behavior when, in their interpretation, emphasis or grading was excessive.

A 2 X 2 factorial analysis of variance was used to determine whether an association existed between subjects' perceived locus of control and their attitudes and beliefs regardless of their sex. Locus of control was found to be a significant source of score variation for both attitudes ($p < .001$) and beliefs ($p < .002$) although a significant interaction ($p < .03$) between sex and locus of control existed within attitude scores.

The findings indicated a positive and significant association between locus of control as perceived by subjects surveyed, regardless of their sex, and their attitude scores, belief scores, and self-reported cheating. External subjects, while not necessarily positive in their attidues were less negative as a group than were internals. In addition, their belief in the legitimacy of cheating was stronger and their inclination to cheat was greater than internal subjects.

The primary implication of these findings is to infer a strong association between student perceptions of external locus of control and the positive view

that cheating is a necessary practice when emphasis is placed upon grades. Since external locus of control was found to be predictive of actual cheating behavior, supportive attitudes toward such behavior, and a strong belief that the behavior was necessary, it could be suggested that the extend to which teachers emphasize grading practices may, in fact, have the effect of forming and/or reinforcing external perceptions within students. The student who is classified as external may find his generalized expectancy of external locus of control reinforced when he is confronted with a grading system which he perceives to operate under control of some powerful other.

THE EFFECT OF PEER INTERACTION IN COGNITIVE CONFLICT SITUATIONS ON THE MORAL DEVELOPMENT OF THIRD GRADE CHILDREN

Sallie H. Plymale
Marshall University

Building from the cognitive-developmental view purported by Jean Piaget - that levels of thought develop in sequence - Lawrence Kohlberg has developed his own theory of moral development. Along with Piaget, he believes that as individuals mature their moral reasoning passes through definable stages in an invariant order. Unlike Piaget, Kohlberg believes that more mature reasoning can be hastened through proper instruction. Where Piaget has virtually ignored the whole question of moral conflicts and their possible effects, Kohlberg has used this area as a base for his work in moral development.

Purpose

The aim of this study was to determine whether social interaction with peer leadership in a cognitive conflict situation affects moral growth. It was designed to test the following hypothesis: Social interaction involving planned group discussions is positively related to growth of moral reasoning; therefore cognitive conflict situations involving peer interaction can enhance the forward movement of moral development.

Method

Subjects - 25 third grade pupils between the ages of 7-9 and 9-8 were used. These children were from a rural school in a lower socioeconomic area.

Design and Procedure

There were four steps in the experimental procedure: (1) a sociogram was taken; (2) pretest to determine dominant moral stage; (3) experimental treatment in which group discussions centered on moral dilemmas; and (4) post-test to determine dominant moral stage.

Experimental Treatment Conditions

From the results of the sociogram and pretest, five groups were formed

with peer leaders. For a period of nine weeks, one hour each week, the subjects met in informal groups and were given hypothetical conflict situations to read and discuss. It was the responsibility of the peer group leader to present the story and initiate the discussion. Each discussion session ended with a debate in which selected group members presented the point of view of their group to the whole class.

A post-test interview, identical in context to the pretest, was administered at the end of the nine week interval.

Results

A measure of change in dominant moral stage from pretest to post-test was determined by obtaining the means of the pre and post test scores, the standard deviation of the difference and comparing the deviations by t test. Ratings of these sets of scores were made. A t-test score of $t = 2.32$ was obtained, barely significant at the .02 level of confidence.

Discussion and Conclusions

It was hypothesized that peer interaction involving cognitive conflict situations would enhance the forward movement of moral development. Although the results were barely significant at the .02 confidence level when the using the t ratio, they do show an increase in moral levels over a nine week period.

We were relying on the peer interaction as a dominant factor in the format of the experiment. But, children from seven to nine years of age are still strongly influenced by more prestigious figures; therefore, because of this, the peer impact was lessened. We were also hampered by the fact that these students were not accustomed to working in small groups and being self-directed.

The hypothesis needs to be tested with children who are accustomed to group work, older, and more peer-oriented. If these conditions are present we will be able to confirm or refute more clearly the role that social interaction cognitive conflicts play in moral development.

KNOWLEDGE AND IMAGES OF INDIA: THE PERCEPTIONS OF SEVENTH GRADE STUDENTS

Perry D. Phillips
West Virginia University

Because unrealistic images and misconceptions about cultures other than one's own can be detrimental to the interrelationship of peoples and nations, students must be afforded a firm knowledge base and be provided with opportunities to develop cultural perspective and understanding. It is the contention of the author that educators need to be aware of the images and knowledge which students bring to the classroom before their formal study of a culture region begins. Instruction must then be related to what the students know and believe in order to make learning meaningful and effective. In keeping with this rationale, this study sought to generate baseline data on the knowledge and images that seventh grade students in West Virginia have of the culture region of India.

India is a culture region which has received minimal attention in the public schools. The following are given as justification for a unit of study dealing with India and her people: India contains one-seventh of the total world population; India is the largest nation in the "uncommitted" bloc; India's pre-eminence in Asis (along with Communist China) gives her importance in international affairs; and, India's cultural tradition provides an instructive contrast to our own.

Previous studies dealing with respondents' images of culture groups other than their own reveal distortions, misconceptions, a lack of perspective, and a lack of information. The images that emerge are superficial and overgeneralized. The material on the images of India and the Indian people is minimal. The research that is available indicates that images of India are generally unfavorable and are lacking in a firm knowledge; there is an emphasis on primitive villages, poverty, wild animals, and jungle adventure, and strange religious customs. Many authors believe that the mass media, textbooks, and courses of study encourage international stereotyping; they cite distortions, value judgments, and the lack of emphasis on important aspects of cultural studies while emphasizing incidental aspects of culture.

Stated in the null form, the major hypothesis of this study was that there would be no difference in meaning of selected concepts and general knowledge of India between two groups of students dichotomized on the variables of sex, race, place of residence, and family income. The sample numbered 1,148 seventh grade students from 45 World Regions and Patterns classes in West Virginia public schools. The evaluative factor of the semantic differential assessed the

students' images on six concepts of India: India, people of India, Indian family system, Indian religion, India's pattern of dress, and India's position in the world. A knowledge of India checklist, constructed at the 1.00 level of Bloom's taxonomy, measured the students' knowledge of the physical goegraphy of India, history before European involvement, history of Europeans in India, indigenous culture, economic development, and current affairs.

The one-way analysis of variance technique was employed to test the significance of the difference between the means for the variables of sex, race, place of residence, and income level of parents. Because the income variable contained five levels, the Duncan new multiple range test was used to make all pairwise comparisons among means on those factors whose calculated F-value was found significant at the .05 level.

The analysis of the mean scores led to the rejection of the null hypothesis that there is no significant difference in meaning of selected concepts between males and females. Significant differences were found to exist on the evaluative factor for all concepts tested.

The analysis of the mean scores on the semantic differential for the variable of race did not produce clear-cut results. While there was significant differences for six of eighteen comparisons, the general trend appeared to be that race was a limited factor in helping to shape one's image of a cultural group.

The analysis of the mean scores for rural and urban students on the semantic differential led to the rejection of the null hypothesis that there is no significant differences in meaning of selected concepts between rural and urban students. The mean scores for the urban students were significantly more positive that were the scores for the rural students. The analysis of the mean scores on the knowledge of India checklist were significant at the .05 level.

The analysis of the mean scores on the income variable for both the semantic differential and the knowledge of India checklist led to the rejection of the null hypothesis that there is no difference in meaning of selected concepts or in general knowledge of India.

In response to the question on the knowledge of India checklist dealing with stereotypes, most students saw India as having primitive villages, tigers and elephants, people with brown skin, and snake charmers rather than seeing India as having large cities, movie theaters, shopping centers, and industrial facilities.

In summary, several misconceptions and unrealistic images about India as a culture region were found to exist among the population tested. It is the author's contention that instruction should be related to what students know or believe in order to make learning more meaningful and effective. If this became the accepted practice, perhaps much could be done to avoid stressing the incidental and bizarre aspects of cultural studies.

THE RELATIONSHIP BETWEEN PERSONALITY AND CONCEPT RECOGNITION AS A RESULT OF PARTICIPATION IN A SOCIAL STUDIES SIMULATION GAME

Larry A. Sayre
Uniontown, Pa., Area Schools

Although waves of enthusiasm or skepticism often follow innovations such as simulation gaming, I am somewhat amazed by the enthusiasm with which simulation games have been adopted by educational personnel without credible evidence of their effectiveness as a learning device.

Much of the zeal with which educational simulation gaming has been accepted is further evidenced in a remark made by Walter Cronkite in a CBS television program, "The Remarkable Schoolhouse." He stated that: "By participating, by playing a game, an otherwise dull subject becomes fascinating and unforgettable to the students."

Research does indicate that educational games seem to motivate the student, involve him, and absorb his interest, but research does not indicate that they help him to learn better than do other methods. Some research has shown evidence that a simulation game is as effective as conventional approaches, but very little research has been conducted to investigate why some students seem to learn more than others or why some students enjoy the games whereas others do not.

Another dimension in which very little research has been conducted is the broad area of conceptualization and simulation gaming. Several claims have been made concerning the impact of gaming on concept formation, such as the Foreign Policy Association Report of 1968 which stated that: "The importance of teaching concepts - an idea that underlies both the "new math" and the "new social studies" - has generally been enthusiastically endorsed by proponents of games. In their view, in fact, games are uniquely fitted to convey conceptual knowledge. . .Students do not simply learn about the balance of power, for example, they experience it in such internation games as I-NS, Crisis, and Dangerous Parallel."

The rationale of this study rests upon the assumption that there is a definite need for research in the areas of simulation games, conceptualization, and individual differences. Therefore, the purpose of this investigation was to determine how a student's ability to adjust to a "new" social studies method (simulation gaming) and a "new" social studies principle (conceptualization) is affected by selected individual personality traits.

The personality traits used to select student groups were achievement,

deference, autonomy, intraception, dominance, and change, as measured by the Edwards Personal Preference Scale (EPPS). The concepts under the study were selected from a consensus list supplied by five social studies specialists who reviewed the *Dangerous Parallel* simulation game used in this study. The concepts were balance of power, imperialism, nationalism, security, sovereignty, leadership, conflict, interdependence, alliance, scarcity, power, and decision making.

The parent population for this study consisted of 294 eleventh grade students enrolled in American History classes. The specific procedures followed were: (1) prior to participating in the game, the students responded to the EPPS and a pre Concept Recognition Test (CRT). The CRT was a multiple choice type instrument constructed by the researchers to assess the concepts under study; (2) the students played the simulation game for eight consecutive 50 minute class periods; and (3) following the game a post CRT was administered.

The EPPS data were used to dichotomize the parent population. The students were placed in rank order from highest to lowest as a result of scores on each of the six personality traits and the sample for each trait consisted of those students who comprised the upper and lower quartiles of scores.

An application of the z value in testing the significance of the difference between two correlated proportions was utilized in a pre-post-test analysis of the data. Once the high and low groups relative to each of the personality traits were established, the pre and post CRT scores were used to form 2 x 2 contingency tables in the manner described by McNemar.

The data indicate that all the personality traits under study were significantly correlated with at least one concept. The most significant area was the analysis of the data relating to the concept of change. Change was significantly related to six concepts: balance of power, imperialism, security, leadership, power, and decision making. It is also interesting to note that the concept of decision making (the publishers of *Dangerous Parallel* describe the game as a decision making simulation) is significantly related to half of the personality traits under study.

PREDICTING SOCIAL STUDIES TEACHER BEHAVIOR

C. Kenneth Murray and *Hugh J. Treanor*
West Virginia University *West Virginia University*

The Teaching Situation Reaction Test (T.S.R.T.) was developed as a paper-and-pencil test for the purpose of assessing the effectiveness of pre-service education experiences. The test is a forced choice instrument in which the testee is asked to respond to a classroom situation by ranking forty-eight items with four possible solutions for each item. The classroom situations involve such aspects of teaching as planning, classroom management, and teacher-pupil relationships.

Previous reports of T.S.R.T. research reported at the annual meetings of the A.E.R.A. in 1965, 1966, and 1968 indicate that the T.S.R.T. gives clear evidence of promise as a research tool in the study of pre-service teacher education. However, due to recent publicity, information concerning the instrument has been requested by several public school districts for use in in-service projects and the present study is an attempt to explore the predictive validity of the instrument with in-service teachers. Therefore, the purpose of this investigation was to explore the effectiveness of the T.S.R.T. as a predictor of in-service social studies teachers verbal and cognitive classroom behavior patterns.

Stated in the null form the hypotheses tested in this investigation were:

There will be no difference between the observed verbal teaching behaviors (as measured by the Observational System for the Analysis of Classroom Instruction) of two groups of in-service social studies teachers (selected as a result of scores on the T.S.R.T.).

There will be no difference between the observed cognitive teaching behaviors (as measured by the Florida Taxonomy of Cognitive Behavior) of two groups of in-service social studies teachers (selected as a result of scores on the T.S.R.T.).

There will be no difference between the observed cognitive behavior of the students (as measured by the Florida Taxonomy of Cognitive Behavior) of two groups of in-service social studies teachers (selected as a result of scores on the T.S.R.T.).

The T.S.R.T. was administered to a parent population of sixty secondary social studies teachers. The teachers were placed in rank order from highest to

lowest as a result of scores on the T.S.R.T. and the sample for this study consisted of those thirty social studies teachers who comprised the upper and lower quartiles of scores on the T.S.R.T. This is a modification of the high and low twenty-seven per cent design used in previous T.S.R.T. research.

The variables that were dependent in this study were verbal classroom behaviors as measured by the Observational System for the Analysis of Classroom Instruction (O.S.A.C.I.) and cognitive behavior in the classroom as measured by the Florida Taxonomy of Cognitive Behavior (F.T.C.B.). All classroom behavior data describing the dependent variables were collected by three trained observers who had previously received special training in the use of the O.S.A.C.I. and the F.T.C.B. Intra-observer reliability and consistency were above .80.

Each of the thirty social studies teachers were observed on five occasions for data collection purposes during the second semester of the 1970-71 school year and the collected data were then used to test the stated hypotheses. A Mann-Whitney U Test was employed to test the differences between the ranks of the two groups. The U statistic is one of the most powerful of the nonparametric tests and it is a most useful alternative to the parametric t test when the t test assumptions are not met.

In regard to verbal behavior, the data indicate that the social studies teachers who ranked high on the T.S.R.T. differed from the low ranked teachers by exhibiting more: (1) praise and encouragement; (2) acceptance and utilization of student ideas; (3) questioning behavior; (4) situations that encouraged emitted student talk; (5) silence and contemplation; (6) indirect teacher talk; (7) more motivating teacher talk; and by exhibiting less (8) confusion and irrelevant behavior; and (9) directed activity and practice.

When the cognitive behavior is considered, the high ranked social studies teachers exhibited significantly more behavior in the areas of knowledge of universals, analysis, systhesis, and evaluation. The analysis of the student cognitive behavior data indicated that the students of the high ranked teachers exhibited significantly more behavior than the students of the low ranked teachers in the areas of knowledge of universals, application, analysis, synthesis, and evaluation.

In summary, the data seems to suggest that the T.S.R.T. has potential for predicting in-service social studies teacher behavior in the areas of verbal and cognitive behavior. In addition, the verbal and cognitive classroom patterns seem to be related to current developments in social studies instruction, i.e., conceptual approaches, questioning strategies, student involvement, inquiry or discovery approaches, and these implications are explored.

PREPARATION OF MATHEMATICS TEACHERS IN PUBLIC SECONDARY SCHOOLS OF WEST VIRGINIA

Steven Hatfield
Marshall University

The purpose of this study was to describe the current situation in West Virginia's public secondary schools with respect to certain factors related to the academic preparation and to the teaching assignments of the mathematics teachers. By comparing and contrasting the present characteristics of today's teachers with those of a decade ago and by determining what other groups are doing in the preparation of mathematics teachers in secondary schools much needed information for future planning can be ascertained.

The findings of the study are based upon data obtained from the responses of 79.3 per cent of those persons who were teaching mathematics in the public secondary schools of West Virginia during the 1973-74 school year. This data was obtained from a questionnaire that was returned by each mathematics teacher.

It was found that 557 or 63.5 per cent of the 877 respondents had a major area of specialization in mathematics. An additional 189 or 21.6 per cent of the respondents had a minor area of specialization in mathematics. Of the respondents 623 or 71.0 per cent had an undergraduate mathematics methods course and 342 or 39.0 per cent had five or less semester hours in mathematics education.

Master's degrees had been received by 32.0 per cent of all the respondents. However, only 7.3 per cent of the recipients of master's degrees had completed their programs in mathematics while another 17.8 per cent had included graduate mathematics courses in their master's programs.

Slightly over 86 per cent of all the respondents preferred to teach mathematics. The future plans of the respondents indicated that 75 per cent planned to teach mathematics for five more years and 54.1 per cent intended to take additional courses in mathematics. An encouraging note was that 43.6 per cent of the respondents had participated in sponsored institute programs and over 68 per cent had participated in state and local in-service programs.

From the results of this information the following recommendations were made.

1. Efforts should be made as soon as possible to reduce the number of inadequately prepared and unqualified mathematics teachers.
2. Efforts should be made to insure that every mathematics teacher has an undergraduate mathematics course.

3. Efforts should be made to increase membership in state and national professional organizations which promote mathematics and mathematics education.
4. In order for the teachers to keep abreast with new programs and methods of teaching mathematics, it is recommended that in-service education programs at the state and local levels be continued and expanded.
5. New efforts should be made to improve the curriculum included in general mathematics.

THE EFFECT OF REFLECTIVE-IMPULSIVE ATTITUDE ON LEARNING UNDER TWO INSTRUCTIONAL TREATMENTS

Edward Moran
West Virginia Department of Education

The purpose of this study was to determine the effect of two different instructional procedures and reflective attitude on learning. A group of seventy-five fourth grade students were administered the Matching Familiar Figures Test for the purpose of assigning each of them to one of the three groups based on degree of reflective attitude. Each subject was also randomly assigned to one of two treatment groups: manipulative and traditional, forming a 3 x 2 randomized block research design. A mathematics unit dealing with change of base was presented in the manipulative class and the traditional class by the same teacher. The traditional class made use of the chalkboard, worksheets, and teacher telling as a presentation vehicle while the manipulative class used Dienes, multibase blocks, abaci, and various three dimentional objects for illustration and individual manipulation. Each student was administered a pre-test, a post test, and an extended post-test. Gain and extended gain scores were derived from these three tests and used as measures of learning and retention. Analysis of variance was used to determine significance of the difference in group means and correlation coefficients were used to determine the relationship between reflective attitude and standardized achievement scores.

Results revealed that reflective attitude had virtually no effect on learning in the two treatment groups. A significant difference was obtained for gain scores on that portion of the tests included in the instructional phase of the study with middle reflective students performing better in the traditional class than in the manipulative class. The difference, however, disappeared on the extended gain scores. Correlation coefficients identified as significant positive relationship between degree of reflective attitude and standardized achievement scores. The one exception was in insignificant correlation between reflective attitude and mathematics.

It was concluded that reflective attitude was of little or no consequence in learning for the mathematics topic used. There was also little or no difference in learning as the result of various degrees of reflective attitude under the two different treatments. The two treatments created a significant difference in retention on the taught portion of the extended post-test with the traditional treatment producing better results than the manipulative materials may be something of a detriment if used only in sporadic, short term instances. Also an opinion of the researcher was the conclusion that reflective attitude may not be a reliable predictor of achievement. In disciplines built on logic such as mathematics and science.

INTERACTION BETWEEN SELECTED PERSONOLOGICAL VARIABLES AND TWO METHODS OF TEACHING PROBABILITY TO PROSPECTIVE ELEMENTARY TEACHERS

Edwin Neale Blackwood, Jr.
Morris Harvey College

The primary purpose of this investigation was to determine if selected personality traits are related to success in a unit on probability when differing modes of instruction are used. In particular, an attempt was made to establish the existence of an interaction between at least one of the personality dimensions and the instructional modes employed.

The study was conducted at Morris Harvey College in Charleston, West Virginia, during the fall semester of 1973 with a total of 28 students participating. These students were enrolled in two sections of a mathematics course required of all prospective elementary teachers.

One of the sections was taught in the conventional instructor-centered approach, while the other section was taught in a laboratory setting in which manipulative devices were used to aid in concept attainment. The instructional period was two weeks, with the investigator teaching both sections.

Prior to the beginning of instruction, both treatment groups, each containing 14 students, were administered the Gordon Personal Profile. Within each of the four personality traits measured by the Profile, Ascendancy, Responsibility, Emotional Stability, and Sociability, the students in each treatment were classified as "high" or "low." These rankings constituted the levels of the two-way factorial design used in the study.

The students were also given an instructor-prepared test in probability as a pre-test. These scores served as the only covariate in the analysis of covariance. The same test later served as the post-test.

Nine hypotheses were tested in this study. These hypothesis were written in null form and none can be rejected. From this the following were concluded:

1. there is no significant difference in achievement between the group classified as high and the group classified as low on any of the four personality scales used in this study,
2. there is no significant interaction between instructional treatments and any of the four personality scales used in this study,
3. there is no significant difference in achievement between the group taught conventionally and the group taught in the laboratory setting.

Although none of the hypotheses could be rejected, this study was seriously limited due to the small size of the treatment groups. Even though

there is this limitation, it is felt that some trends that appear to be taking place should be noted.

1. In the group taught conventionally, those students who ranked high on the Ascendancy scale had a tendency to achieve at a higher level than those students who ranked low on this scale.

Within the group instructed in a laboratory setting these two groups of students achieved at approximately the same level.

2. In the conventially instructed group, those students who ranked high on the Emotional Stability scale had a tendency to achieve at a higher level than those who ranked low on this scale.

A very noticeable reversal of this effect was observed for the laboratory group.

DOGMATISM AND MANIPULATIVE DEVICES IN THE LEARNING OF MATHEMATICAL CONCEPTS

Ralph Hall
Marshall University

The use of the laboratory in learning mathematical ideas has been expanding at all levels, kindergarten through college, with only inconclusive research findings for support. Some mathematics educators have believed that certain students may benefit more than others from the laboratory approach. This study was conducted primarily to investigate the possible existence of an interaction between dogmatism and levels of laboratory treatment in learning mathematical concepts in probability study.

Ninety-two college students enrolled in the first of two mathematics content courses required of all prospective elementary teachers were administered the Rokeach Dogmatism Scale E. The scorers in the upper quarter and lower quarter were randomly assigned to either a laboratory treatment or no-laboratory treatment for the study of a unit on probability. The treatments were conducted for six fifty-minute periods on the Mondays, Wednesdays, and Fridays of two consecutive weeks. Consistent with using the extremes in dogmatism, the laboratory and no-laboratory treatments were very different in their presentations although they utilized the same textbook material. The presentation in the laboratory treatment was through the extensive use of manipulative devices such as dice, coins, spinners, thumbtacks, colored beads, and geometric shapes to aid in the acquisition of probability concepts. No such devices were in the no-laboratory treatment and the presentation was through the use of lecture and discussion.

Pre-tests and post tests were given immediately prior to and after the treatment sessions. Also four weeks after the post-test was given a retention-test was administered. Analyses of variance and covariance were performed with the post- and retention-test data as the criterion and the pre-test data as the covariate. None of the F ratios were significant and consequently the null hypothesis with respect to the existence of an interaction was not rejected. Similarly, null hypotheses with repeat to the independent variables, dogmatism and treatment, were not rejected.

The following conclusions seemed reasonable:

1. Dogmatism, as a personality variable, does not interact with levels of laboratory treatment in the learning of mathematical ideas.
2. High dogmatics and low dogmatics learn mathematical ideas equally well.
3. Approaches using many manipulative devices and approaches not using them at all are equally effective in the learning of mathematical ideas.

AN ANALYSIS OF CHILDREN'S WRITTEN SOLUTIONS TO WORD PROBLEMS

J. Dan Knifong & Boyd Holtan
West Virginia University

It is established as folklore that children have difficulties with arithmetic word problems. However, studies have not revealed the relative influences of different factors involved in children's work problem difficulties even though one of the most persistant assumptions is that poor reading abilities contribute substantially to children's difficulties.

The study analyzed the written work of 35 sixth grade children who attempted the word problem section of the Metropolitan Achievement Test (1958). The purpose was to determine the nature of children's errors so that teachers would have a factual basis upon which to design instruction. Specifically, the 470 erred problems (45% of 1050 attempted, 30 problems X 35 students) were tabulated into two broad categories which distinguish (a) a *minimum set* of computational and clerical errors from (b) all other errors. Each of these broad categories was then broken into smaller, more specific types of erred problems. Subcategories under (a) were clerical and computational errors of three types and under (b) were average and area problems, use of wrong operation, no response but went on to other problems, no response and didn't go on to other problems, and erred responses with no clues.

The tabulations of errors indicated that of the 470 erred problems, 52% of the errors were in category (a) (clerical and computational) while the remaining 48% were in category (b). The major feature of the tabulated erred problems was the relatively large number of clerical and computational errors which could be *positively* identified as the sole source of difficulty. If a child's work indicated the correct procedure and yet the problem was missed because of an inadvertent computational or copying error, it was assumed that the child read and understood the problem at least well enough to work it. Hence, there was little or no possibility of reading difficulties having affected the unsuccessful completion of 52% of the erred problems. Any reading difficulties or other factors which *might* have caused missed problems must be represented among the remaining 48%. However, it is certain that the causes of error in these remaining problems must have been reading *plus other factors*, including an indeterminant number of computational errors which could not be positively identified from the written work.

Regardless of how old-fashioned it might seem, these data definitely suggest that inaccurate computation plays the major role of a child's failure to

solve typical work problems. That is not to deny the existence of other statistically significant factors, but it is clear that no matter how statistically well correlated these factors may be, computational errors were positively identified as the deterrent to the children's success on 52% of the erred problems. Therefore, work leading to children's improved computational skills would have tended to eliminate nearly half of the word problem errors and hence can be recommended strongly as a teaching strategy.

AN ANALYSIS OF SELECTED COURT CASES AND PUBLIC POLICIES PERTAINING TO SEARCH AND SEIZURE IN PUBLIC SCHOOLS

Stanley Anderson
Glenville State College

The purposes of this study were: (1) to find and assemble the court cases, statutory law provisions, state attorney general opinions, state board of education, and state superintendent rulings which define the law in regard to locker searches and searches of the student's person; (2) to present briefs of the leading cases which define the rights of students and administrative authority; (3) to present a brief summary of the assembled cases and public policies; (4) to determine what policies and practices are currently employed in the administration of locker searches and searches of the student's person in five selected states which are representative of the United States; (5) to develop conclusions and implications from the findings to guide school administrators when dealing with search situations; and (6) to develop a model search and seizure policy consistent with current judicial and public policy guidelines.

State appellate court and federal court decisions relating to search and seizure within the public schools were searched. Cases which clarified constitutional rights of students and administrative authority were briefed and discussed.

All fifty state school board executive secretaries were surveyed to determine the prevalence of local school board and state public policies relating to search and seizure within their respective states.

The population for the survey of current policies and practices employed by local school administrators consisted of the 1,614 public school districts located in the states of Florida, Minnesota, New York, Washington, and West Virginia. All 27 large districts (enrollment of more than 25,000) and 90 medium districts (enrollment of 10,000 to 24,000) within the selected states were surveyed. A ten percent stratified random sample of the 1,497 small districts (enrollment of less than 9,999) was surveyed.

Briefs of court cases pertaining to the issue provided the following conclusions: (1) public school search and seizure cases are of recent origin and are not unique to a particular section of the country; (2) this incidence of cases relating to searches of the student's person is far greater than searches of lockers and desks; (3) due to the consistency of judicial decisions and their lack of appearance since 1969, the locker search issue may have been resolved; (4) the *in loco parentis* doctorine influenced a significant number of decisions; (5) the question of the exclusionary rule as applied to school officials is not settled; (6)

the power of the state to control the conduct of children reaches beyond the scope of its authority over adults; (7) school officials may be considered derelict in their duties if they fail to make an investigation to ascertain the validity of information reported to them; and (8) indications are that courts will view uniformed school officers, acting entirely alone, in the same light as they would consider a police officer.

The survey revealed that almost all public policies existing at the state level were developed after 1970. Attorney general opinions, state superintendent rulings and state board of education policies were found in a few states; however, none of the respondent states reported the existence of state statutes relating specifically to search and seizure within their public schools.

An overall 28 per cent of the local school districts responding to the survey in the five selected states had written policies pertaining to some aspect of search and seizure. The incidence of written policies was much more pronounced in large districts than in small and medium sized districts. The larger the school district the greater the sensitivity to and recognition of the problem and the more intensive the effort to cope with the problem via the development of policies.

Although court cases have evolved from searches of students' person far more frequently than locker and desk searches, school districts of all sizes have reacted with a higher incidence of policies relating to locker searches.

A model policy statement commensurate with prevailing judicial and public policy guidelines regarding search and seizure was developed for possible use by public school districts.

THE FIELD EXPERIENCE

Nancy J. Priselac
Harrison County TEC

and

Harold I. Goodwin
West Virginia University

Education Administration is a performance endeavor: what is taught is expected to be translated into calculated actions in the discharge of administrative responsibilities. The teaching-learning situation "on campus" may provide students with administration content, including theoretical material. However, "on campus" education is a difficult setting in which to put theory into practice. While a number of instructional techniques are being developed to approximate on-the-job realities, the actual test of the teaching is in the field where performance is in fact the discharge of administrative or supervisory responsibilities.

There are a number of reasons why the Harrison County Teacher Education Center and the Department of Education Administration at West Virginia University are engaged in a joint venture to develop an off campus program. Two of the reasons are embodied in the following questions.

Do we utilize content and theory more effectively when education is field related? Can we introduce new ideas more effectively in the field?

The answer is not always clear because a number of students are in administration courses who are in training for either administration or non-administration positions. Those people who are teaching and in administration courses do undertake administration-supervision responsibilities while in training. Those experiences are actual practices applying under instructor direction certain theoretical and other content material in which there is an immediate response to their actions. They are able to judge the utility and impact of their applications of the material.

The second benefit is an increased perception of the role of the school administration: the incentives and the constraints under which they operate to fulfill obligations. Based on these two conditions, the field experience is valuable as a training device for future administrators.

The second set of students are practicing school administrators and supervisors. Perhaps it is with these students that the field experience is most valuable. Several program extensions and/or modifications should be cited in particular at this point in time. One of the first administrative courses offered by contract placed heavy emphasis on testing and evaluation. Principals and supervisors elected several high level objectives to evaluate, analyze and synthesize. For example, one principal deemed to evaluate the total reading program within a K thru 6 organizational structure and use the data to project

future program development. Numerous instruments were selected after consultations with evaluation experts, computer technologists and statistical analyzers. Based upon the results of this one program three other buildings have used similar strategies to prepare new programs within leading departments.

A second course offered by contract focused on buildings and equipment. Outside consultants such as county superintendents, university specialists, architects and others were invited to share their expertise with class members. Following this course, at least one building principal projected a renovation for his building which has been completely renovated during the last year. Other building modifications have included implementating (1) new special education facilities, (2) special reading rooms, (3) special tutoring rooms and, (4) facilitating open classroom learning situation experiences. Principals in larger high schools have included computer assisted scheduling as an administrative technique due to the impact of Center courses.

The practicing administrator or supervisor is held accountable for his actions by his superior. He also is judged on a continuing basis by those subject to his authority. The utility of subject matter is of immediate concern to them because it is tested on the basis of performance leading to an increasing or non-increasing set of circumstances where public education occurs. The application of subject matter becomes the basis for a more or less positive accountability response.

It seems to follow that the more occasions administrators and supervisors have to apply under guidance the substance of administration and supervision, the better can be judged the feasibility of subject matter. It can be modified as on-cite experience dictate either a different means to apply then or the substance itself can be altered. As the students perceive the experience outcomes they can judge their benefits, and where the judgments are favorable, not only continue to apply them, but seek further applications of additional material.

The experience at Harrison County suggests to us that new ideas are best introduced where they can be tested rapidly under reality conditions. It also suggests not only is more content used on a continuing basis, but that students begin to seet on their own new content to be applied to their jobs. We cannot ask for much more than that.

EDUCATIONAL NEEDS AND EXISTING RESOURCES FOR COMMUNITY COLLEGE CURRICULUM DEVELOPMENT

Samuel Bailey
Wood County Schools

The purpose of this study was to conduct a survey of senior students in high school and selected community organizations to determine their concepts of the post-high school educational needs and the possible existing resources which can be used for further development of the community college curriculum.

The population of this study was the senior class students in the 14 high schools and seven types of community organizations found in the counties of Calhoun, Jackson, Pleasants, Ritchie, Roane, Tyler, Wirt and Wood which are located in the west-central section of West Virginia.

A questionnaire was developed to determine the post-high school needs of the students. The community organizations responded to a questionnaire to determine the post-high school educational needs of this area and the existing resources of facilities, instructional materials, personnel, and services which can be used for community college curriculum development. The investigator also surveyed the possible methods to obtain direct funds to support community college curriculum programs.

The results of this study showed that resources of facilities, materials, personnel and services exist within each of the eight counties. However, there was not enough resources within each county to completely facilitate the post-high school educational needs which were listed. Direct financial support was found to be available through student fees, the West Virginia Board of Regents, and federal sources. Federal funds were available for vocational-technical programs, continuing education, and community services programs to be used for curriculum development, buildings, and equipment.

The conclusions were that many post-high school educational needs within the eight county area can be met by using the existing resources available with the aid of additional resources from the community college. These additional resources would vary with the educational needs of the area and the particular program to be offered.

WEST VIRGINIA ASSOCIATION OF TEACHER EDUCATORS

Executive Committee

Mildred Holt, President
Kanawha County Schools

Paul McGhee, Vice President
West Virginia University

Joe Basile, Secretary-Treasurer
West Virginia State Department of Education

Russell Fitzgeral, Past President
Fairmont State College

Charles Parker, Executive Committee
Bluefield State College

Garry Lynn Thompson, Executive Committee
Upshur County Schools

Anne Rada, Executive Committee
Kanawha County Schools

Barbara Jones, National ATE Delegate
Kanawha County Schools

David Koontz, National ATE Delegate
Marshall University